

ROY COOPER

Governor

ELIZABETH S. BISER

Secretary

MICHAEL ABRACZINSKAS

Director



NORTH CAROLINA
Environmental Quality

Enter Calendar Date

Mr. Steve Suck
Operations Manager
Wilbara, LLC
4620 Highway 421 North
Wilmington, NC 28402

SUBJECT: Air Quality Permit No. 09904T03
Facility ID: 6500347
Wilbara, LLC
Wilmington
New Hanover County
Fee Class: Title V
PSD Class: Major

Dear Mr. Suck:

In accordance with your completed Air Quality Permit Application for renewal of your Title V permit received March 30, 2021, we are forwarding herewith Air Quality Permit No. 09904T03 to Wilbara, LLC, 4620 Highway 21 North, Wilmington, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.



North Carolina Department of Environmental Quality | Division of Air Quality
217 West Jones Street | 1641 Mail Service Center | Raleigh, North Carolina 27699-1641
919.707.8400

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

New Hanover County has triggered increment tracking under PSD for PM₁₀, SO₂, and NO_x. However, this permit renewal does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from (**Permit Issuance Date**) until (**Permit Expiration Date**), is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning this matter, please contact Eric L. Crump, P.E. at (919) 707-8470 or eric.crump@ncdenr.gov.

Sincerely yours,

Mark J. Cuilla, EIT, CPM, Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

c: Michael Sparks, EPA Region 4
Wilmington Regional Office
Central Files
Connie Horne (cover letter only)

ATTACHMENT to Permit No. 09904T03

Insignificant Activities per 15A NCAC 02Q .0503(8)

Emission Source ID No.	Emission Source Description
I-B01	Natural gas-fired boiler (6 million Btu per hour)
I-T01	Sulfur storage tank (nominal 9,000 ton storage capacity)
I-T02 through I-T06	Five (5) sulfuric acid storage tanks (nominal 29,000 gallon storage capacity, each)
IES-Fugitive Dust	Dust from haul roads
I-SG-01 NSPS JJJJ	Natural gas-fired standby emergency generator (150 kW)

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the Permittee is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" or 02Q .0711 "Emission Rates Requiring a Permit."
3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled "Specific Permit Conditions Regulatory Guide." The link to this site is as follows:
<http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide>.

Summary of Changes to Permit

The following changes were made to the Wilbara LLC, Wilmington, Air Permit No. 09904T02:

Page No.	Section	Description of Changes
Cover and throughout	---	Updated all dates and permit revision numbers
3	2.1 A	<ul style="list-style-type: none"> Deleted all mentions of “100%” from the table Changed all mentions of “BACT” in table to “PSD BACT” Added odor control regulation (02D .1806) to table
4	2.1 A.1.a, b; 2.1 A.2.a 2.1 A.1.c 2.1 A.3 2.1 A.3.a 2.1 A.3.f	<p>Removed the word “100%” before “sulfuric acid produced”</p> <p>Changed “2.1 A.4.c-f” to “2.1 A.4.c through f”</p> <p>Deleted “(40 CFR 60, Subpart H, Sulfuric Acid Plants)” from heading</p> <p>Added the phrase “Standards of Performance for Sulfuric Acid Plants” after “Subpart H”</p> <p>Changed heading from Monitoring/Recordkeeping to Monitoring</p>
5	2.1 A.3.g.ii 2.1 A.3.h 2.1 A.3.i	<p>Updated noncompliance clause to most current stipulation</p> <p>Added Recordkeeping heading; updated noncompliance clause to most current stipulation</p> <p>Inserted new paragraph “i” requiring submittal of excess emission reports for excess emissions of SO₂. Former paragraph “i” is now paragraph “j”, updated to the most current stipulations.</p>
6	2.1 A.4.d.i and ii 2.1 A.4.c.iii 2.1 A.4.d.iii 2.1 A.4.f	<p>Changed “iii” to “Section 2.1 A.4.c.iii”</p> <p>Changed “i” to “Section 2.1 A.4.c.i”</p> <p>Changed “ii” to “Section 2.1 A.4.d.ii”</p> <p>Changed “except as provided in Section 2.1 A.4.f below” to “except as provided in Section 2.1 A.4.g below”</p>
6-7	2.1 A.4.g	<ul style="list-style-type: none"> Changed “monitoring requirements in Section 2.1 A.4.e. above” to “monitoring requirements in Section 2.1 A.4.f. above” Added subparagraphs i through iii establishing requirements for data substitution, monitor downtime, and reporting of excess emissions
7	2.1 A.4.h 2.1 A.5	<p>Inserted new paragraph “h” requiring submittal of excess emission reports for excess emissions of SO₂. Former paragraph “h” is now paragraph “i”</p> <p>Updated section to reflect the most current stipulations for 15A NCAC 02 .0614 (including references to 15A NCAC 02D .0517, 02D .0524 (40 CFR 60, Subpart H), and 02D .0530. Section specifies that sulfuric acid mist is the pollutant to be controlled.</p>

Page No.	Section	Description of Changes
9	2.1 A.6	Updated section to reflect the most current stipulations for 15A NCAC 02D .1100, including dates for modeling analysis submittal and approval
	2.1 A.7	Added stipulations for 02D .1806: Control and Prohibition of Odorous Emissions
10-20	3	Updated General Conditions to Version 5.5 dated August 25, 2020



State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
09904T03	09904T02	XXXX	XXXX

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee:

Wilbara, LLC

Facility ID:

6500347

Facility Site Location:

4620 Highway 421 North

City, County, State, Zip:

Wilmington, New Hanover County, North Carolina 28147

Mailing Address:

4620 Highway 421 North

City, State, Zip:

Wilmington, New Hanover County, North Carolina 28147

Application Number:

6500347.21A

Complete Application Date:

March 30, 2021

Primary SIC Code:

2819

Division of Air Quality,

Wilmington Regional Office

Regional Office Address:

127 Cardinal Drive Extension

Wilmington, North Carolina 28405-3845

Permit issued this the XX day of XXXXX, 2021

Mark J. Cuilla, EIT, CPM, Chief, Air Permitting Section

By Authority of the Environmental Management Commission

Table of Contents

SECTION 1: PERMITTED EMISSION SOURCE (S) AND ASSOCIATED
AIR POLLUTION CONTROL DEVICE (S) AND APPURTENANCES

SECTION 2: SPECIFIC LIMITATIONS AND CONDITIONS

2.1 Emission Source(s) Specific Limitations and Conditions (Including specific requirements, testing,
monitoring, recordkeeping, and reporting requirements)

SECTION 3: GENERAL PERMIT CONDITIONS

ATTACHMENT

List of Acronyms

SECTION 1- PERMITTED EMISSION SOURCE (S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE (S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
3 - 9	ES-01 PSD BACT, NSPS H	Double-adsorption sulfuric acid manufacturing plant (575 tons per day nominal capacity)	ME-01	Vertical tube mist eliminator system installed on final adsorbing tower

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1 Emission Sources and Control Devices Specific Limitations and Conditions

The emission source and associated air pollution control device and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

A. Double-adsorption sulfuric acid manufacturing plant (ID No. ES-01) with associated mist eliminator (ID No. ME-01)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur Dioxide	27 pounds per ton of sulfuric acid produced	15A NCAC 02D .0517
	4 pounds per ton of sulfuric acid produced	15A NCAC 02D .0524 (40 CFR 60, Subpart H)
	2.3 pounds per ton of sulfuric acid produced (rolling 3-hour average)	15A NCAC 02D .0530 (PSD BACT)
Sulfuric Acid Mist	0.5 pounds per ton of sulfuric acid produced	15A NCAC 02D .0517
	0.15 pounds per ton of sulfuric acid produced	15A NCAC 02D .0524 (40 CFR 60, Subpart H)
	0.075 pounds per ton of sulfuric acid produced (3-hour average)	15A NCAC 02D .0530 (PSD BACT)
	Compliance Assurance Monitoring (CAM) Plan	15A NCAC 02D .0614
	State Enforceable Only 2.4 lbs/hr 57.5 lbs/day	15A NCAC 02D .1100
Nitrogen Oxides	5.8 pounds per ton of sulfuric acid produced	15A NCAC 02D .0519
Visible Emissions	10 percent opacity	15A NCAC 02D .0524 (40 CFR 60, Subpart H)
Operational Limit	Average production rate shall not exceed 575 tons per day on a 12-month rolling basis.	15A NCAC 02D .0530 (PSD BACT)
Odors	State-enforceable only Odorous emissions must be controlled	15A NCAC 02D .1806

1. 15A NCAC 02D .0517: EMISSIONS FROM PLANTS PRODUCING SULFURIC ACID

- a. Sulfur dioxide emissions from the sulfuric acid plant (**ID No. ES-01**) shall not exceed 27 pounds per ton of sulfuric acid produced.
- b. Sulfuric acid mist emissions from the sulfuric acid plant (**ID No. ES-01**) shall not exceed 0.5 pounds per ton of sulfuric acid produced.

Testing/Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- c. The Permittee shall demonstrate compliance with this standard in accordance with Sections 2.1 A.4.c through f. of this permit. If the Permittee fails to comply with Sections 2.1 A.4.c through f. of this permit, or if any testing or monitoring results indicate that emissions do not comply with the limits in Sections 2.1 A.1.a. or b. of this permit, the Permittee shall be deemed in non-compliance with 15A NCAC 02D .0517.

Reporting [15A NCAC 02Q .0508(f)]

- d. The Permittee shall submit a semiannual summary report of monitoring and recordkeeping activities as provided in Section 2.1 A.4.g. of this permit.

2. 15A NCAC 02D .0519: CONTROL OF NITROGEN DIOXIDE AND NITROGEN OXIDES EMISSIONS

- a. Nitrogen oxides emissions from the sulfuric acid plant (**ID No. ES-01**) shall not exceed 5.8 pounds per ton of sulfuric acid produced.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0519.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring, recordkeeping, or reporting is required to demonstrate compliance with 15A NCAC 02D .0519.

3. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524, "New Source Performance Standards" (NSPS), as promulgated in 40 CFR 60, Subpart H, "Standards of Performance for Sulfuric Acid Plants," including Subpart A, "General Provisions".

Emission Limitations [15A NCAC 02D .0524]

- b. Sulfur dioxide emissions from the sulfuric acid plant (**ID No. ES-01**) shall not exceed 4 pounds per of sulfuric acid produced, based on a rolling 3-hour average. [40 CFR 60.82(a)]
- c. Sulfuric acid mist emissions from the sulfuric acid plant (**ID No. ES-01**) shall not exceed 0.15 pounds per ton of sulfuric acid produced, based on a 3-hour average. [40 CFR 60.83(a)(1)]
- d. Visible emissions from the sulfuric acid plant (**ID No. ES-01**) shall not exceed 10 percent opacity. [40 CFR 60.83(a)(2)]

Testing [15A NCAC 02Q .0508(f)]

- e. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of any test are above the limits given in Section 2.1 A.3.b, c, or d above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring [15A NCAC 02Q .0508(f)]

- f. The Permittee shall measure sulfur dioxide emissions using a continuous emissions monitoring system (CEMS) as required in Section 2.1 A.4.e or f of this permit. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if it fails to monitor and record the emissions as required, or if the monitored emission rate exceeds the limit in Section 2.1 A.3.b or c above.
- g. To ensure compliance, once a month the Permittee shall observe the emission point of the sulfuric acid plant (**ID No. ES-01**) for any visible emissions above normal. The monthly observation must be made for each month of

the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:

- i. Take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
- ii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 A.3.d. above.

The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0524 if the required monthly observations are not conducted as required; if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made.

Recordkeeping [15A NCAC 02Q .0508(f)]

- h. The results of the visible emissions monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. The date and time of each recorded action;
 - ii. The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. The results of any corrective actions performed.
 The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- i. The Permittee shall submit excess emission reports for any excess emissions of sulfur dioxide that occurred during the reporting period. Excess emissions are defined as all 3-hour rolling averages during which the average sulfur dioxide exceeds the emission standard in Section 2.1 A.3.b above. The Permittee shall submit semiannual excess emissions and monitoring systems performance reports calculated on a quarterly basis, postmarked on or before January 30 for the reporting period between July 1 and December 31 and postmarked on or before July 30 for the reporting period between January 1 through June 30.
- j. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Sections 2.1 A.3.f through h above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

4. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. The Permittee shall comply with all applicable provisions, including the notifications, emission limits, testing, monitoring, recordkeeping, and reporting requirements in accordance with 15A NCAC 02D .0530, "Prevention of Significant Deterioration of Air Quality" as promulgated in 40 CFR 51.166.
- b. Emissions from the sulfuric acid plant (**ID No. ES-01**) shall not exceed the following Best Available Control Technology (BACT) emission standards:

Pollutant	Description of Control Technology	BACT Emission Limit
Sulfur Dioxide	Four-pass, dual adsorption process with cesium-promoted catalyst in the 3 rd and 4 th passes	2.3 lb/ton of 100% sulfuric acid produced (rolling 3-hour average)
Sulfuric Acid Mist	Vertical tube mist eliminator	0.075 lb/ton of 100% sulfuric acid produced (3-hour average)

- c. The average production rate of the sulfuric acid plant (**ID No. ES-01**), on a 12-month rolling basis, shall not exceed 575 tons per day.

Testing [15A NCAC 02Q .0508(f)]

- d. The Permittee shall conduct an annual performance test of the sulfuric acid plant (**ID No. ES-01**) to demonstrate compliance with the **sulfuric acid mist** standard in Section 2.1 A.4.a. The annual test must be conducted once

per calendar year to comply with this requirement. The annual performance test shall be conducted at least 6 months, but no greater than 18 months, following the previous performance test. Testing shall be conducted in accordance with the procedures in 40 CFR 60.85, including but not limited to the following:

- i. Except as provided in Section 2.1 A.4.c.iii below, Method 8 shall be used to determine the acid mist concentrations and the volumetric flow rate of the effluent gas. The moisture content may be considered to be zero. The sampling time and sampling volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).
- ii. Except as provided in Section 2.1 A.4.c.iii below, the emission rate of acid mist shall be calculated for each run in accordance with 40 CFR 60.85(b)(1).
- iii. The Permittee may use the procedures specified in 40 CFR 60.85(c) as an alternative to the procedures in Section 2.1 A.4.c.i and ii above.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the required testing is not performed as required above or if the test results show an exceedances of the emission limitation provided in Section 2.1 A.4.a above.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- e. Each calendar month, the Permittee shall monitor and record the average sulfuric acid production rate (in tons per day) on a 12-month rolling basis as provided below:
 - i. Record the total sulfuric acid production rate (P_{TOTAL}) for the previous calendar month (in tons/month);
 - ii. Calculate and record the average daily production rate for the previous calendar month using the following equation (in tons/day):

$$P_i = \frac{P_{TOTAL}}{d_i}$$

where,

- P_i = Average daily production rate (P) during the previous calendar month (i); and,
 d_i = Total number of days during the previous calendar month (i)

- iii. Calculate and record the average daily production rate for the previous 12-month period by summing the value of P_i , calculated as provided in Section 2.1 A.4.d.ii above, for the previous 12 months and dividing the total by 12 (in tons/day).

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the production rate is not monitored and recorded as required above, or if the production rate exceeds the limit provided in Section 2.1 A.4.b of this permit.

- f. The Permittee shall monitor sulfur dioxide emissions from the sulfuric acid plant (**ID No. ES-01**) in accordance with the following procedures, except as provided in Section 2.1 A.4.g below: [40 CFR 60.84(a)-(c)]
 - i. Install, calibrate, maintain, and operate continuous emission monitoring systems (CEMS) for the measurement of SO₂ emissions. The pollutant gas used to prepare calibration gas mixtures under Performance Specification 2 (40 CFR 60, Appendix B) and for calibration checks under 40 CFR 60.13(d), shall be SO₂. Method 8 shall be used for conducting monitoring system performance evaluations under 40 CFR 60.13(c) except that only the SO₂ portion of the Method 8 results shall be used.
 - ii. Establish a conversion factor for the purpose of converting monitoring data into units of the applicable standard (lb/ton). The conversion factor shall be determined, as a minimum, three times daily by measuring the concentration of SO₂ entering the converter using suitable methods (e.g., the Reich test, National Air Pollution Control Administration Publication No. 999-AP-13) and calculating the appropriate conversion factor for each eight-hour period in accordance with 40 CFR 60.84(b).
 - iii. Record all conversion factors and how they were computed, including the input values.

The Permittee shall maintain records of all required monitoring data in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the sulfur dioxide emission rate is not monitored and recorded as provided above or if the emission rate exceeds the limit provided in Section 2.1 A.4.b. of this permit.
- g. As an alternative to the sulfur dioxide emission monitoring requirements in Section 2.1 A.4.f above, the Permittee may install, calibrate, maintain, and operate CEMS for the measurement of SO₂, O₂, and CO₂ (if required) in accordance with 40 CFR 60.84(d). In this alternative approach, a conversion factor based on process rate data is not necessary. The Permittee shall calculate the SO₂ emission rate according to the equation and procedures provided in 40 CFR 60.84(d).
 - i. Excess Emissions: The SO₂ CEMS data reported to meet the requirements of this section shall include data

substituted using the following procedure. The Permittee shall substitute for each hour of data missing with the greater of either (A) or (B):

(A) the average of the hourly pollutant emission rates recorded by the appropriate CEMS of the hour before and the hour after the missing data period; or

(B) the maximum hourly pollutant emission rate of the past 720 operating hours.

The missing data procedure shall be used whenever the emission unit combusts any fuel.

ii. Monitor downtime: For CEMS required by Sections 2.1 A.4.f and g above, monitor downtime:

(A) shall not exceed 5.0 percent of the operating time in a calendar quarter;

(B) shall be calculated using the following equation:

$$\%MD = \left(\frac{\text{Total Monitor Downtime}}{\text{Total Source Operating Time}} \right) \times 100$$

Where:

"Total Monitor Downtime" = number of hours in a calendar quarter where an emission source was operating but data from the associated CEMS are invalid, not available, and/or filled with missing data procedure.

"Total Source Operating Time" = number of hours in a calendar quarter where the emission source associated with the CEMS was operating.

iii. The Permittee shall report excess emissions for all periods of operation, including start-up, shutdown, and malfunction.

If the associated CEMS does not comply with these requirements or the SO₂ emissions exceed the limits in Section 2.1 A.4.b, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530

Reporting [15A NCAC 02Q .0508(f)]

- h The Permittee shall submit excess emission reports for any excess emissions of SO₂ that occurred during the reporting period. Excess emissions are defined as all 3-hour rolling average during which the average SO₂ exceeds the emission standard above. The Permittee shall submit semiannual excess emissions and monitoring systems performance reports calculated on a quarterly basis, postmarked on or before January 30 for the reporting period between July 1 and December 31 and postmarked on or before July 30 for the reporting period between January 1 through June 30.
- i The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Sections 2.1 A.1. e through g above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

5. 15A NCAC 02D .0614: COMPLIANCE ASSURANCE MONITORING

- a. For the sulfuric acid plant (**ID No. ES-01**) controlled by a vertical tube mist eliminator system (**ID No. ME-01**), the Permittee shall comply with 40 CFR Part 64 pursuant to 15A NCAC 02D .0614 to ensure that the emission source complies with the applicable emission limits of sulfuric acid mist in 15A NCAC 02D .0517, 15A NCAC 02D .0524, and 15A NCAC 02D .0530.

Background

- b. Emission Units: Sulfuric acid plant (**ID No. ES-01**)
- c. Applicable Regulations, Pollutant, Emission Limit, and Control Technology
 - i. Regulation: 15A NCAC 02D .0517, 15A NCAC 02D .0524 (40 CFR 60, Subpart H), and 15A NCAC 02D .0530
 - ii. Pollutant and Emission Limits: Sulfuric acid mist emissions specified in 15A NCAC 02D .0517, 15A NCAC 02D .0524, and 15A NCAC 02D .0530
 - iii. Control Technology: Vertical tube mist eliminator system installed on final adsorbing tower

Monitoring Approach

- d. The key elements of the monitoring approach for sulfuric acid mist control, which is emitted as a particulate, including parameters to be monitored, parameter ranges and performance criteria are presented in the following table.

Measure	Indicator
I. Indicator	Visible emissions (VE)
Measuring approach	VE from the vertical tube mist eliminator system will be observed daily using EPA Reference Method 22-like procedures.
II. Indicator Range	An excursion is defined as the presence of VE. Excursion triggers an inspection, corrective action, and a reporting requirement. The quality improvement plan (QIP) threshold is excursions occurring on five days (consecutive or non-consecutive days) in a six-month reporting period for which the Permittee did not perform a demonstration of compliance with the 10 percent opacity standard in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes. The QIP shall be prepared within 30 days of reaching the QIP threshold and shall contain procedures for evaluating control performance problems.
III. Performance Criteria	
Data Representativeness	VE shall be observed at the emissions point (vertical tube mist eliminator system exhaust).
QA/QC Practices and Criteria	The observer shall be familiar with EPA Reference Method 22 and follow Method 22-like procedures when VE is observed. Method 9 observations are conducted by a certified Reference Method 9 observer.
Monitoring Frequency	A VE observation shall be performed daily, when operating.
Data Collection Procedures	The VE observation is recorded by the observer.
Averaging Period	N/A

Reporting [15A NCAC 02Q .0508(f) and 40 CFR 64.9(a)]

- e. The Permittee shall submit a summary report of all monitoring activities given in Section 2.1 A.5.c and d, above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations for the requirements of this permit must be clearly identified. In addition, the summary report shall contain the following information, as applicable:
- Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

State-Enforceable Only**6. 15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS**

- a. Pursuant to 15A NCAC 02D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limit shall not be exceeded:

Toxic Air Pollutant	Facility-Wide Emission Limit
Sulfuric Acid	2.4 lbs/hr 57.5 lbs/day

- b. The Permittee has submitted a toxic air pollutant dispersion modeling analysis dated March 26, 2008 for the facility's toxic air pollutant emissions as listed in the above table. The modeling analysis was reviewed and approved by the AQAB on May 5, 2008. Placement of the emission sources, configuration of the emission points, and operation of the sources shall be in accordance with the submitted dispersion modeling analysis and should reflect any changes from the original analysis submittal as outlined in the AQAB review memo.
- c. The Permittee shall demonstrate compliance with these emissions limitations in accordance with the testing, monitoring, recordkeeping, and reporting requirements in Section 2.1 A.4. of this permit.

State-enforceable only**7. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS**

The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

SECTION 3 - GENERAL CONDITIONS (version 5.5, 08/25/2020)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NO_x budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**

1. Administrative Permit Amendments [15A NCAC 02Q .0514]

The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.

2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]

The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.

3. Minor Permit Modifications [15A NCAC 02Q .0515]

The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.

4. Significant Permit Modifications [15A NCAC 02Q .0516]

The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.

5. Reopening for Cause [15A NCAC 02Q .0517]

The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**

1. Reporting Requirements

Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:

- a. changes in the information submitted in the application;
- b. changes that modify equipment or processes; or
- c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]

- a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
- b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
 - i. the changes are not a modification under Title I of the Federal Clean Air Act;
 - ii. the changes do not cause the allowable emissions under the permit to be exceeded;

- iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
 - iv. the Permittee shall attach the notice to the relevant permit.
 - c. The written notification shall include:
 - i. a description of the change;
 - ii. the date on which the change will occur;
 - iii. any change in emissions; and
 - iv. any permit term or condition that is no longer applicable as a result of the change.
 - d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
- 3. Off Permit Changes [15A NCAC 02Q .0523(b)]
 The Permittee may make changes in the operation or emissions without revising the permit if:
 - a. the change affects only insignificant activities and the activities remain insignificant after the change; or
 - b. the change is not covered under any applicable requirement.
- 4. Emissions Trading [15A NCAC 02Q .0523(c)]
 To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A Reporting Requirements for Excess Emissions and Permit Deviations [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

“Excess Emissions” - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. (*Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.*)

“Deviations” - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

- 1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
- 2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
 - a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
 - i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
 - name and location of the facility;
 - nature and cause of the malfunction or breakdown;
 - time when the malfunction or breakdown is first observed;
 - expected duration; and
 - estimated rate of emissions;
 - ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
 - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
 - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B Other Requirements under 15A NCAC 02D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. Emergency Provisions [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
 - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
 - b. the permitted facility was at the time being properly operated;
 - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
 - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. Permit Renewal [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least six months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In

either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]

1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
 - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
 - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
 - c. the applicable requirements under Title IV; or
 - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 02Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
 - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
 - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
 - c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.
2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or

interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .0507(d)(3)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(d)]

1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) – FEDERALLY-ENFORCEABLE ONLY

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. Title IV Allowances [15A NCAC 02Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. Air Pollution Emergency Episode [15A NCAC 02D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. Registration of Air Pollution Sources [15A NCAC 02D .0202]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. Ambient Air Quality Standards [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. General Emissions Testing and Reporting Requirements [15A NCAC 02Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .1110, or .1111 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance for emission sources subject to Rules .0524, .1110, or .1111, the Permittee shall provide and submit all notifications, conduct all testing, and submit all test reports in accordance with the requirements of 15A NCAC 02D .0524, .1110, or .1111, as applicable. Otherwise, if emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may

request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.

- a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
 - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
 - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
 - iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
- b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. Reopening for Cause [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
 - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
 - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
 - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. Reporting Requirements for Non-Operating Equipment [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

MM. Fugitive Dust Control Requirement [15A NCAC 02D .0540]

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method

22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. **Specific Permit Modifications** [15A NCAC 02Q .0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(b)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
 - a. a description of the change at the facility;
 - b. the date on which the change will occur;
 - c. any change in emissions; and
 - d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT

List of Acronyms

AOS	Alternative Operating Scenario
BACT	Best Available Control Technology
BAE	Baseline Actual Emissions
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
CSAPR	Cross-State Air Pollution Rule
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
GHGs	Greenhouse Gases
HAP	Hazardous Air Pollutant
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NAAQS	National Ambient Air Quality Standards
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standard
NSR	New Source Review
OAH	Office of Administrative Hearings
PAE	Projected Actual Emissions
PAL	Plantwide Applicability Limitation
PM	Particulate Matter
PM_{2.5}	Particulate Matter with Nominal Aerodynamic Diameter of 2.5 Micrometers or Less
PM₁₀	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
TAP	Toxic Air Pollutant
tpy	Tons Per Year
VOC	Volatile Organic Compound